

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-31 (canceled).

Claim 32 (currently amended): A polynucleotide encoding a variant of human tissue-type plasminogen activator (t-PA) protein; wherein said human t-PA protein comprises residues 1-527 of SEQ ID NO:12; and wherein said variant comprises a single chain human tissue-type plasminogen activator t-PA protein having an R275 and at least one other basic amino acid residue in the a serine protease region substituted by a non-basic amino acid residue thereby disrupting the a salt bridge interaction between an aspartate 477 and a lysine 429.

Claim 33 (previously presented): An expression vector comprising the polynucleotide of claim 32.

Claim 34 (previously presented): A cell comprising the expression vector of claim 33.

Claim 35 (currently amended): A polynucleotide encoding a variant of human tissue-type plasminogen activator (t-PA) protein; wherein said human t-PA protein comprises residues 1-527 of SEQ ID NO:12; and wherein said variant comprises a single chain human

~~tissue-type plasminogen activator t-PA~~ protein selected from the group consisting of R275E, H417D, R275E, H417E and R275E, K429Y.

Claim 36 (previously presented): An expression vector comprising the polynucleotide of claim 35.

Claim 37 (previously presented): A cell comprising the expression vector of claim 36.

Claim 38 (currently amended): A diagnostic kit comprising antibodies to a variant of human tissue-type plasminogen activator (t-PA) protein; wherein said human t-PA protein comprises residues 1-527 of SEQ ID NO:12; and wherein said variant comprises a single chain human tissue-type plasminogen activator t-PA protein having an R275 and at least one other basic amino acid residue in the a serine protease region substituted by a non-basic amino acid residue thereby disrupting the a salt bridge interaction between an aspartate 477 and a lysine 429.

Claim 39 (previously presented): A diagnostic kit comprising polynucleotides capable of hybridizing to the polynucleotide of claim 32.

Claim 40 (previously presented): A method of making a variant single chain human tissue-type plasminogen activator protein comprising the step of culturing the cell of claim 37.

Claim 41 (previously presented): The method of claim 40 further comprising the additional step of purifying the protein.